Public Works (1911) Department.

G.O., No. 4099

DATED 20-~~11~~-1911 .

[Despatch Abstract.]

Keelapallakurichi Kannoy Periyar System

Sanctioning an estimate, amounting to Rs. 2,017, inclusive of establishment charges for improvements to No. 1 — , Melur Q, Madura D.

Indexed.

Regd as 79/1/12

P. W. 9.
600—27-7-11.

BACK PAPERS.

G.O.	No	Department	Date	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No	Department	Date	G.O	No.	Department.	Date

Government of Madras.

PUBLIC WORKS DEPARTMENT.

IRRIGATION.
ACCOUNT.

Recd.	1912.	*Enclosures*
Regd.		*Spare copies*

G.O. No. 409 I., 20th December 1911.

Keelapallakurichi Kanmoy, Periyar System

Sanctioning an estimate, amounting to Rs. 2,017, inclusive of establishment charges for improvements to No. 1 —, Mélûr taluk, Madura district.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following papers :—

I

Letter—from J. M. LACEY, Esq., Superintending Engineer, VI Circle.
To—the Chief Engineer for Irrigation.
Dated—Trichinopoly, the 17th October 1911.
No.—1168 C.E.

I have the honour to forward herewith for your approval and sanction of Government an estimate, amounting to Rs. 1,540, for improvements to No. 1 Keelapallakurichi kanmoy, a tank to be maintained with reference to G.O. No. 1250 I., dated 15th December 1905, and fed by the Tiruvadur offtake X Branch channel, Periyár system, in the Mélúr taluk.

2. The improvements proposed consist in the construction of—

(i) Front heads to sluices Nos. 2 and 3 as shown on plan M.D Nos. M. No. 345 E. & F. of 1911 ;

(ii) a new 9″ cement pipe sluice as shown on plan M.D. No 345-D of 1911 ; and

(iii) a weir 85 feet long on design M.D No. 345-G of 1911, so as to be capable of discharging the maximum quantity of surplus estimated as likely to enter the tank.

3. The details of the works proposed, etc., are explained in the report attached to the estimate

4. In G.O. No. 1250 I., dated 15th December 1909, Mariappan Endal is incorrectly marked as one to be amalgamated with Melapallakurichi tank ; it has to be bracketed with Keelapallakurichi kanmoy, an estimate for improvements to which is now submitted for sanction.

5. As regards the abandonment of Eluvankarayan Endal and Kattayappan Endal, the beds of which have been included under the ayacut of this tank, the Collector of Madura has been addressed by the Executive Engineer to express his opinion on the subject and his reply when received will be communicated.

6. The work will be completed before the end of 31st March 1913.

7. An estimate for repairs to the tank has been received from the Executive Engineer and will be sanctioned by me as soon as the estimate for improvements to the tank is received sanctioned.

8. The rates for important items of works are supported by data and the estimate is recommended for sanction.

ENCLOSURES

Report to accompany the estimate for "Repairs and improvements to Keelapalla-kurichi kanmoy of Nalukulam village, Mélúr taluk."

		RS.
Amount of estimate—		
Improvements	... ...	1,540
Repairs	... ...	1,380
	Total ...	2,920

General.—This tank is situated about a mile and a half south-east of Tiruvadur village and is one of those to be maintained as per G.O. No. 1250 I., dated 15th December 1905. In this Government Order it is further proposed to form one tank by throwing together this Keelapallakurichi tank and the adjacent Mariappan Endal and to give the tank the name of Keelapallakurichi kanmoy of Nalukulam village.

Source of supply.—The combined tank so formed in addition to the drainage from its catchment receives the surplus of Melapallakurichi tank and Mallangulam tank which in their turn receive supply from a canal from Tiruvadur tank and is thus Periyár supplied.

Ayacut.—The present ayacut under the two tanks, *i.e.*, Mariappan Endal and Keelapallakurichi kanmoy, is 154·98 acres and by the abandonment of two tanks below, viz., Eluvankarayan Endal and Kattayappan Endal, whose beds it is proposed to sell in auction, ultimate ayacut including tank beds and ayacuts under them will be 205·99 acres (*vide* revenue statements attached).

Surplus arrangements.—There is an existing mamul course at the right flank and the upper odai runs close by the left flank. The soil, however, at the left flank is very saline and would not admit of reliable foundations for a masonry work. It is therefore proposed to build a weir 85 feet long at the right flank to discharge the maximum flood entering the tank. The surplus channel is adequate and capacious.

Sluices.—There are three sluices in existence—one, a pot sluice in Mariappan Endal, ruined and unfit for use and two masonry sluices without regulating heads. A 9″ pipe sluice in place of the pot sluice at C.S. 11 and regulating heads to the existing masonry sluices as per plans enclosed will be provided.

F.T.L.—The F.T.L. has been fixed by local enquiry and from existing water marks. For verification, the F.T.L. contour has been traced and the submergence of foreshore lands has been stated by the Collector of Madura to be mamul (*vide* statement and Collector's N. Dis. No. 2065/Gl. of 1909, dated 3rd January 1910, herewith attached).

Bund.—The bund is weak and low throughout and will be raised 3 feet above M.W.L. with a top width of 6 feet and side slopes $1\frac{1}{2}$: 1. The portion of bund from C.S. 1 to 17 being composed of soft soil, provision is made in the estimate for gravelling the top of bund and turfing both the slopes. The bund towards the left flank being, as stated above, of very saline nature and being also liable to be affected by the uppar odai, provision is made in the estimate for protecting the rear slope with rough stone revetment for a length of 700 feet.

Materials.—Good lime and surki are to be got from Madura 17 miles away. Stones are available in Pancha Pandaval Malai quarry 2 miles off. Gravel may be taken from near the right flank.

Data statement in support of rates and hydraulic particulars are attached.

J. M. M. PARKER,
Executive Engineer, Madura Division.

26*th July* 1911.

---

(2)

Letter—from the Deputy Collector, Mélúr division.
To—the Collector of Madura.
Dated—the 18th December 1909.
No.—D. Dis. 1447-Rev.

In reply to your N. R.O.C. No. 2065-Gl., dated 17th May 1909, herewith returned with the enclosures, I have the honour to report that the village officers of Tiruvathur, in the limits of which village the lands referred to in the list received from the Executive Engineer are situated, and of Nalukulam to which the tank belongs have stated that the lands enclosed within the red ink line in the Engineer's sketch map are liable to submergence when the tank is at F.T.L., *i.e.*, for a period of two or three months.

2. The owners of the lands, however, deny the liability of these lands to submergence.

3. The statement of the village officers may be taken as correct and the *lands held to be liable to "mamul"* submergence.

4. The red ink contour line showing the water mark at F.T.L. excludes S. No. 489, but the statement of lands forwarded by the Executive Engineer shows that 27 cents in S. No. 489 is also subject to submergence.

Copy of Endorsement No. N. Dis. 2065-*Gl. of* 1909, *dated* 3*rd January* 1910, *by the Collector of Madura.*

Forwarded to the Executive Engineer, Madura division, with reference to his No. 832 M., dated 11th May 1909.

---

(3)

Keelapallakurichi kanmoy of Nalukulam village in Mélúr taluk

CALCULATION for the design of the weir proposed to be constructed at right flank.

Combined catchment area = 1·25 sq. miles.
Area of free basin = 0·75 „

Maximum flood discharge $D = CM^{\frac{2}{3}} - cm^{\frac{2}{3}}$

$$C = 500;\ c = 100$$

$$500 \sqrt[3]{1{\cdot}25^2} - 100 \sqrt{0{\cdot}50^2}$$
$$= 500 \times 1{\cdot}16 - 100 \times 0{\cdot}63$$
$$= 580 - 63 = 517 \text{ cusecs.}$$

Length of weir designed = 85 ft.

This is capable of discharging with a head of 1·50 ft. and by using the formula

$$\tfrac{2}{3}\, c\, l \sqrt{2\, gh} \times h;\ c = \tfrac{5}{8}$$
$$= \tfrac{2}{3} \times \tfrac{5}{8} \times 85 \times 8 \times 1{\cdot}5 \times 1{\cdot}22 = 518{\cdot}50 \text{ cusecs.}$$

18*th July* 1911.

J. M. M. PARKER,
Executive Engineer, Madura Division.

II

Note by the Chief Engineer for Irrigation, R.O.C. No. 2922/11, dated 6th December 1911.

With his letter No. 1168 C.E., dated 17th October 1911, the Superintending Engineer, VI Circle, submits an estimate, amounting to Rs. 1,540, for improvements to the Keelapallakurichi kanmoy of the Periyár system, Mélúr taluk, Madura district. The improvements consist of—

(1) providing front heads to sluices Nos. 2 and 3 in the tank;
(2) constructing a new pipe sluice in place of a ruined pot sluice; and
(3) constructing a masonry surplus weir 85 feet long at the right flank.

The lengths of the proposed wings in front of sluices Nos. 2 and 3 have now been curtailed and returns added to them to admit of a slope of $1\frac{1}{2}$ to 1. The wings allowed in front of the proposed pipe sluice have been omitted, and the head walls in front and rear extended to admit of a slope of $1\frac{1}{2}$ to 1. The level of the apron of the proposed weir has been lowered to level + 47·00, and the top of body wall at the ends raised to 2 feet above M.W.L. instead of 1 foot. These alterations have increased the amount of the estimate from Rs. 1,540 to Rs. 1,640.

2. The estimate as altered in this office is recommended for sanction.

3. The plans and estimates relating to the repairs to the tank bund may be returned to the Superintending Engineer to be dealt with himself.

H. E. CLERK,
Chief Engineer for Irrigation.

To the Joint Secretary to Government, P.W.D. (Irrigation Branch).

Order—No. 409 I., dated 20th December 1911.

The following estimate is sanctioned :—

Imperial.

Capital Expenditure not charged to Revenue.

49. Irrigation.

Periyár System.

Open Capital Account.

I. Works

3. Distributaries.

C. Works.

Unremunerative Work.

Improvements to No. 1, Keelapallakurichi kanmoy, Mélúr taluk.

Estimate—

	RS.
I. Works	1,640
II. Establishment	377
Total ..	2,017

2. This sanction is registered as No. 79 I. of 1911–12 and will expire on the 31st March 1913.

3. The attention of the Superintending Engineer is drawn to paragraph 1 of the foregoing note by the Chief Engineer for Irrigation.

4. The plans and estimates for repairs referred to in paragraph 3 of the Chief Engineer's note are returned to the Superintending Engineer, being within his powers of sanction.

(True Extract.)

H. E. CLERK,
Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Chief Engineer for Irrigation.
,, Superintending Engineer, VI Circle,
with plans and estimates.
,, Accountant-General.

Forwarded to the

(By Order.)

Under Secretary to Govt., P.W.D.,
Irrigation Branch.

Mp 1+ 29 C.f. from ~~the~~ S.E, VI Circle, d/17.10.11, No 1168 CE
Note by the Chief Engr. for Irrigation
ROC No 2922/11 d/6.12.11.

Point Report Keelapallakurichi tank

CURRENT No 14610
PASSED ON BY
R. C.
U. R. C.
REF.
R. K.
D. O.
5/15/12

With his letter No. 1168 CE dated 17th October 1911 the Superintending Engineer 6th circle, submits an estimate amounting to Rs 1,540 for improvements to the Keelapallakurichi Kounmoy of the Periyar system, Melur taluk, Madura District. The improvements consist of

1. Providing front heads to sluices No. 2 & 3 in the tank
2. Constructing a new pipe sluice in place of a ruined pot sluice
3. Constructing a masonry surplus weir 85 ft long at the right flank.

The lengths of the proposed wings in front of sluices No. 2 & 3 have now been curtailed and returns added to them to admit of a slope of 1½ to 1. The wings allowed in front of the proposed pipe sluice have been omitted and the head walls in front

40 9 1

5

7 ~~10~~ 7.8

and rear extended to admit a slope of 1½ to 1. The level of the apron of the proposed weir has been lowered to level + 47.00 and the top of body wall at the ends raised to 2 ft above M.W.L instead of 1 ft. These alterations have increased the amount of the estimate from Rs 1540 to Rs. 1640

2// The estimate as altered in this office is recommended for sanction.

3// The plans & estimates relating to the repairs to the tank bund may be ~~are~~ returned to the SE to be dealt with ~~by~~ himself.

M
20.11.11

[signature] 6/12/11
D.E.I

To the Joint Secy to Govt PWD (I)
with the SE's letter and encls in original.

408 - 1

6

Tableingabstract

~~SUBJECT.~~ — Keelapallakurichi Kanmoy, Periyar System — Sanctioning an estimate amounting to Rs 2017 inclusive of establt-charges for improvement to No 1 ———, Melur Taluq, Madura Dt.

PUBLIC WORKS DEPARTMENT,

IRRIGATION BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Cross References. ———

Tank, Project, Madura Dt.

READ the following

pp 97 to 100 C.f. — ~~Note by the Chief Engr for Irrgn~~ dated 6.12.11, Rec No 2922/11

Print Report Ref Transfer Statement

—

Order No. 409 I., dated 20-12-1911.

The following estimate is sanctioned:—

Imperial.

Capital Expenditure not charged to Revenue

49—Irrigation.

Periyar System.

Open Capital account.

I—Works.

3. Distributaries.

C. Works.

Unremunerative work.

Improvements to No 1 Keelapallakurichi Kanmoy, Melur Taluq.

Estimate

(1) Reqnd.
(2) C.S. 15/12

409 — V

9 ~~2~~ 9.P

Estimate –

	Rs
I – Works	1,640
II – Establt	377
Total	2,017

1640
23
4920
3280
377.20

2 This sanction is registered as No 79 I of 1911-12 and will expire on the 31st March 1913.

3 The attention of the Supg: Engr: is drawn to para 1 of the foregoing note by the Chief Engr for Irrign.

4 The plans and estimates for repairs referred to in para 3 of the Chief Engr's note are returned to the S.E, being within his powers of sanction.

Issue.

[initials] 5-12-11

[initials] 6/12/11

Despatched on 2/2/12

Despatched [illegible]

[initials] 6-12-11

To the Chief Engr. for Irrign ✓ Issued in MS on 22-12-11
" Supg Engr: VI Circle ✓ with plans & estimates } MS
" Acctt Genl, Madras ✓ 409 R

Ordinary Press.

3

Misc 5.12.11

[illegible] 18/12

Sa 16-12-11 3/[illegible] SK 16/12

Rs 1-10np

409 l 12

Nofile

5-1-29 B III